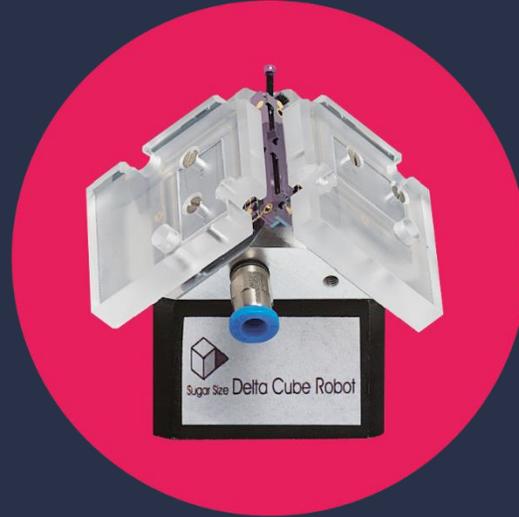




# CSEM mission



Development and transfer of world-class (micro-)technologies to the industrial sector – in Switzerland, as a priority – in order to reinforce its competitive advantage.

- Cooperation agreements with established companies
- Encouraging the creation of start-ups

## Photonics @ CSEM focuses on

- **Integrated** photonics
- Novel optical **elements** and **systems**
- Photonics-based **systems**
- High **performance** laser sources and **laser-based** instruments and processing tools

2

**Complete solutions from components to the  
integration & packaging of optoelectronic systems**

## EU Pilot lines

- Launched by the European Commission as Photonics Public Private Partnership
- Aim: help companies take photonics technologies from lab into market
- Examples include



- Details see: <https://www.swissphotonics.net/home?se=past>

# EU pilot line Phabulous



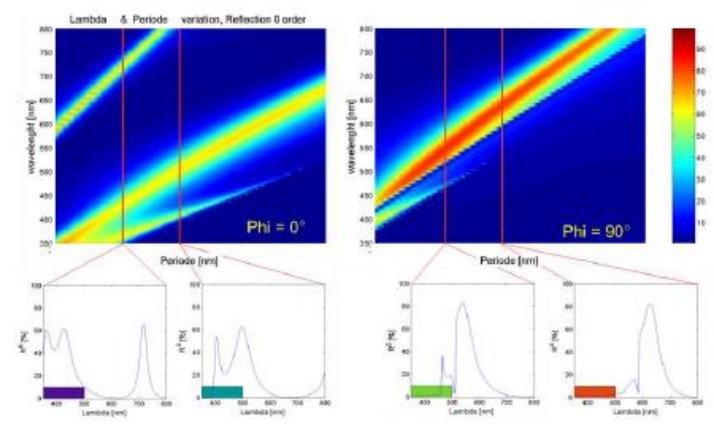
## Customer position

- Development phase
- Up-scaling phase

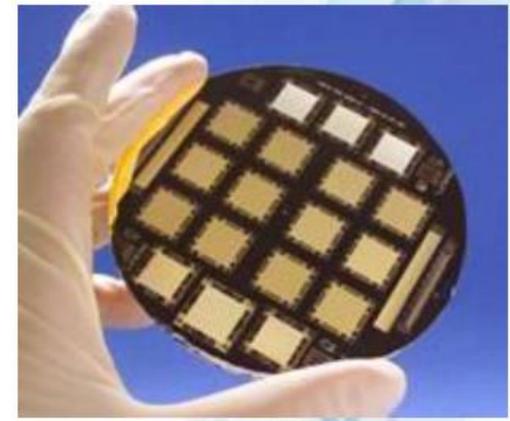
## MedPhab offering

- Designs for concepts
- Designs for manufacture
- Component manufacture
- Device integration
- Characterization

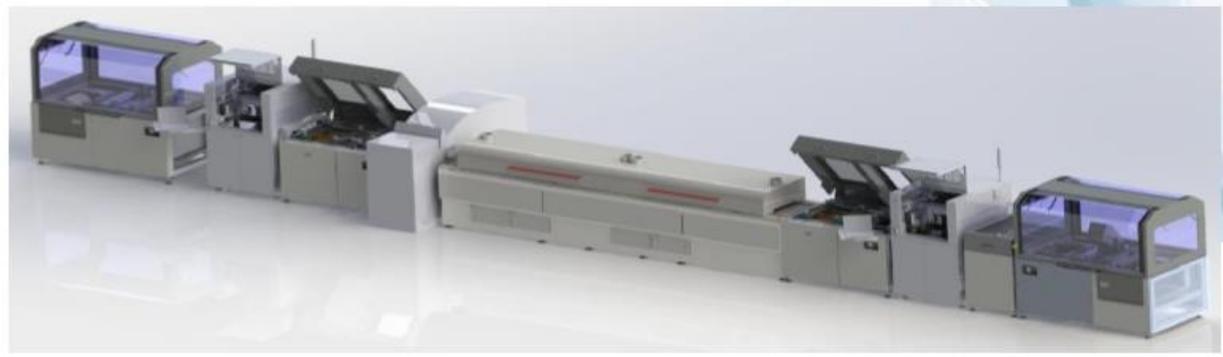
## Photonics simulation



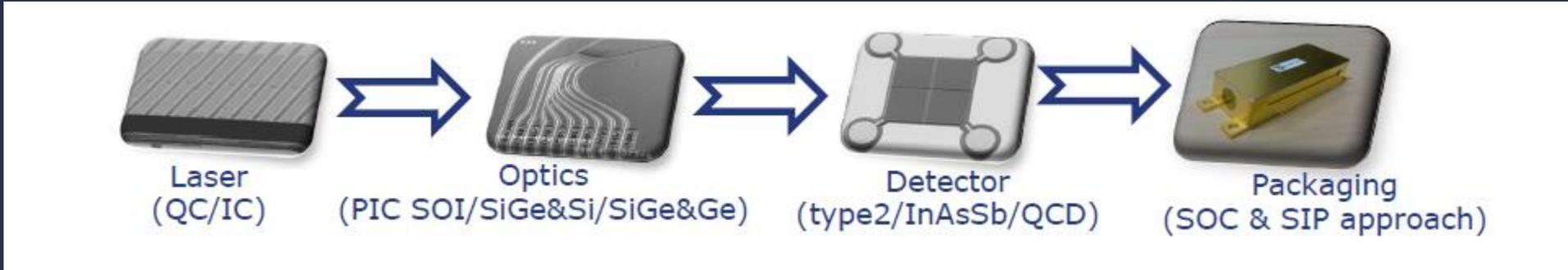
## Prototyping



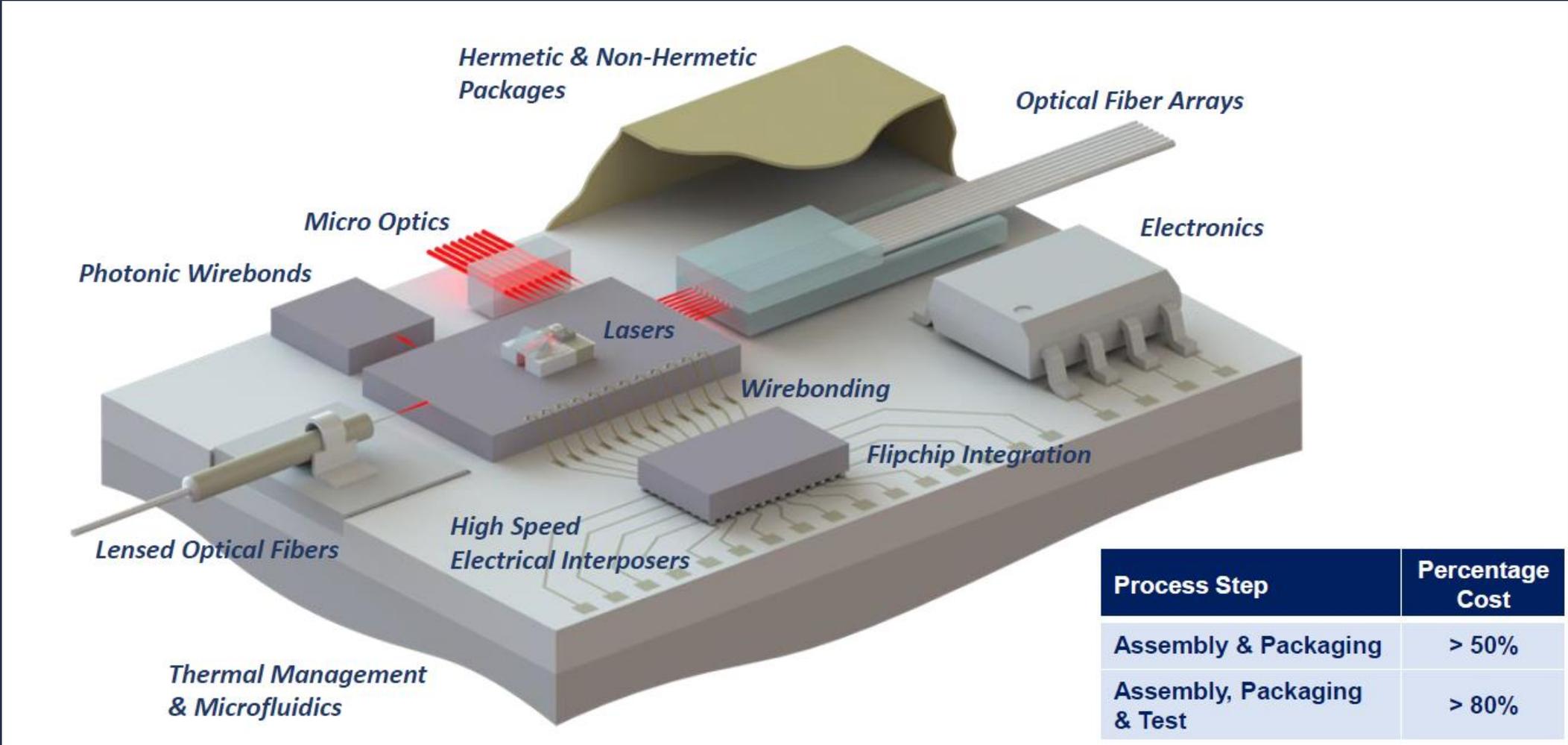
## Pilot Production



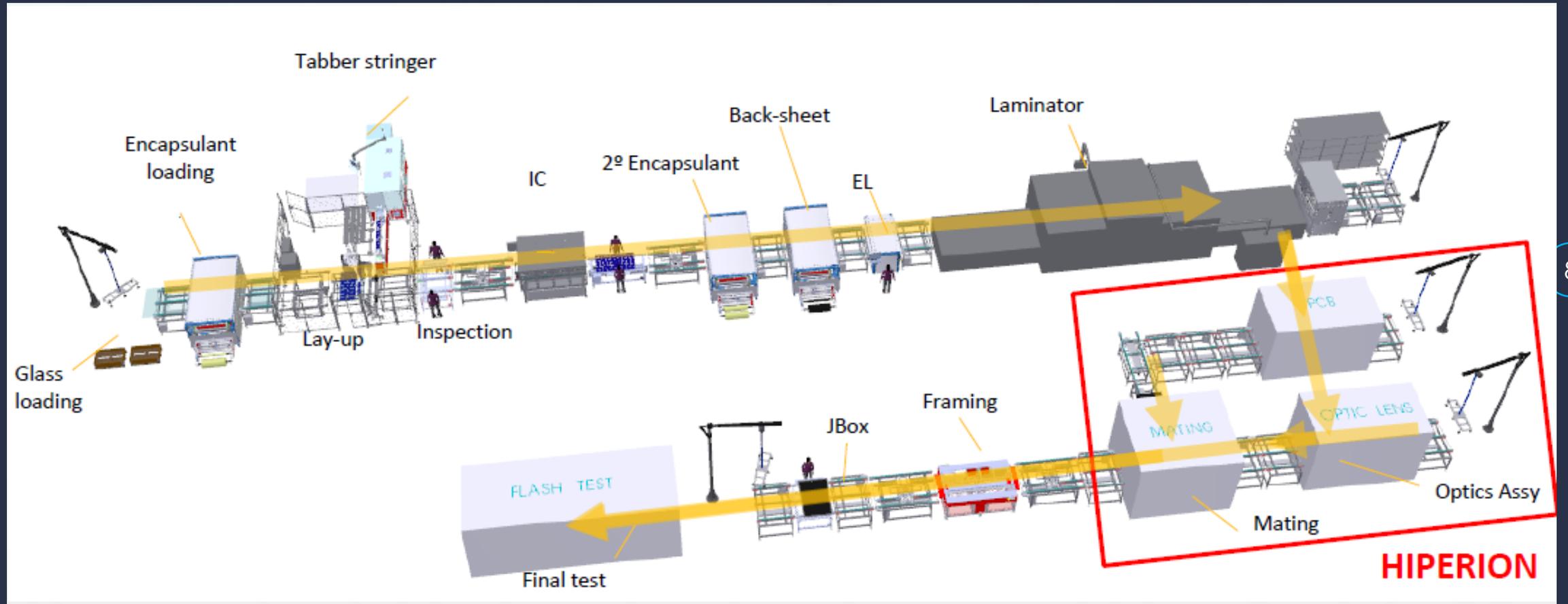
# MIRPHAB



# PIXAPP



# HIPERION



Pilot lines are decentralized

Phabulous

EU

csem

JOANNEUM RESEARCH

Fraunhofer EEP

VTT

leti

SOSS MicroOptics

morphonics

NANOCOMP

PowerPhotonics

IASERA

Wielandts upmt

HELLA

limbak

microoLed

ZUMTOBEL

SEISENBACHER

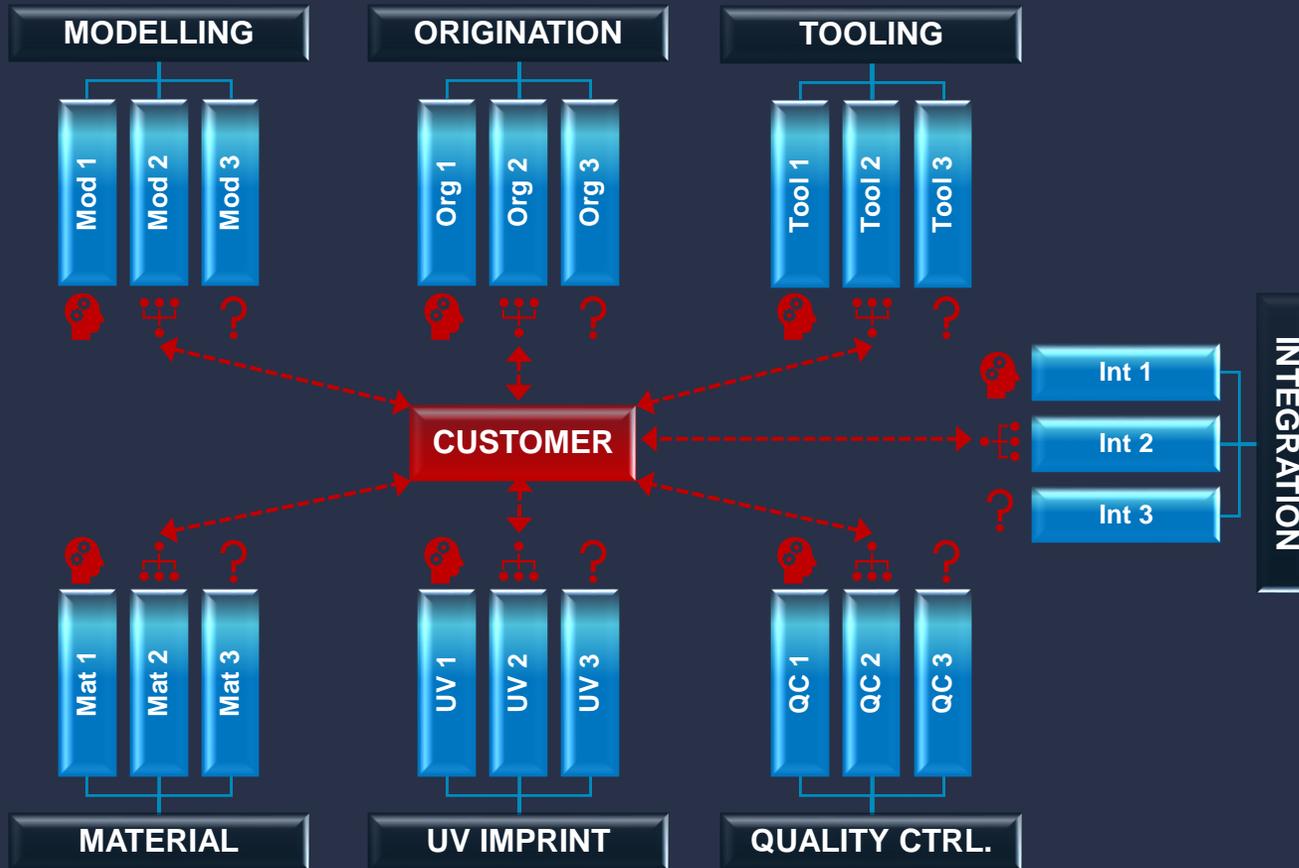
SWAROVSKI

EPIC

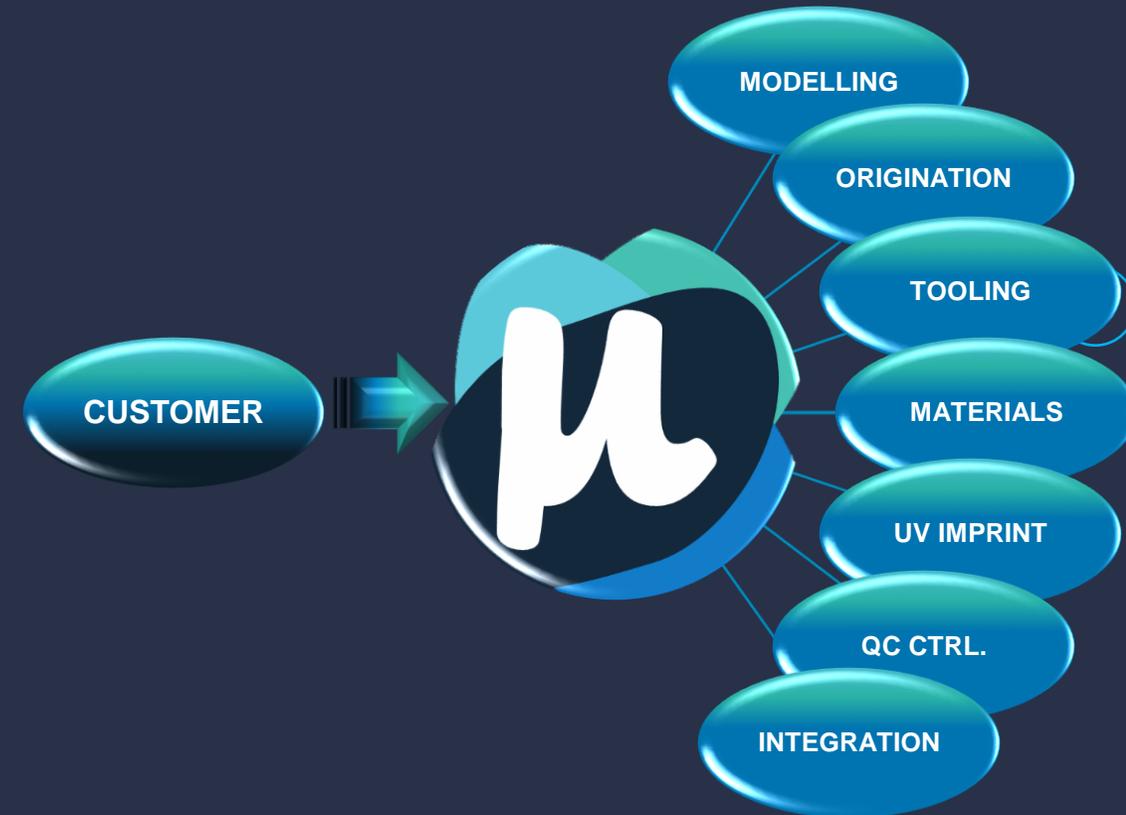
AMIRÈS

# Pilot lines have single access point

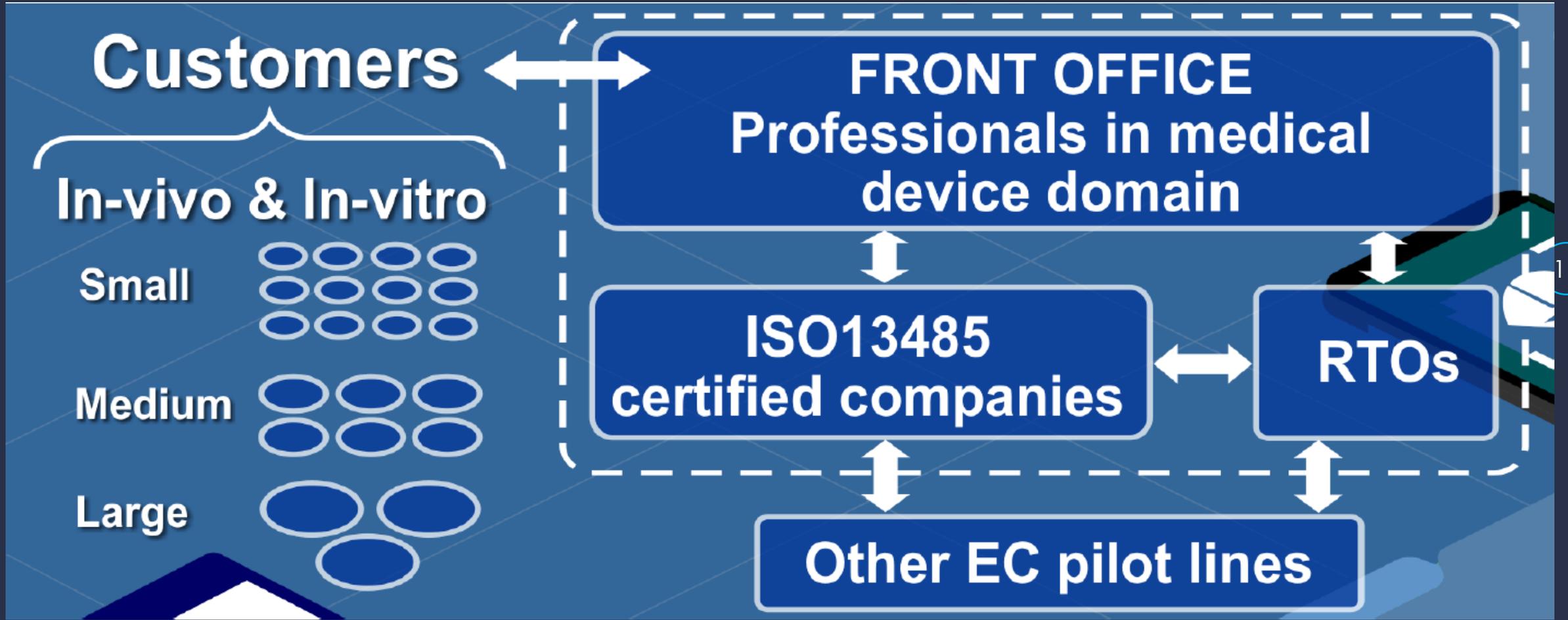
## Without PHABULO $\mu$ S



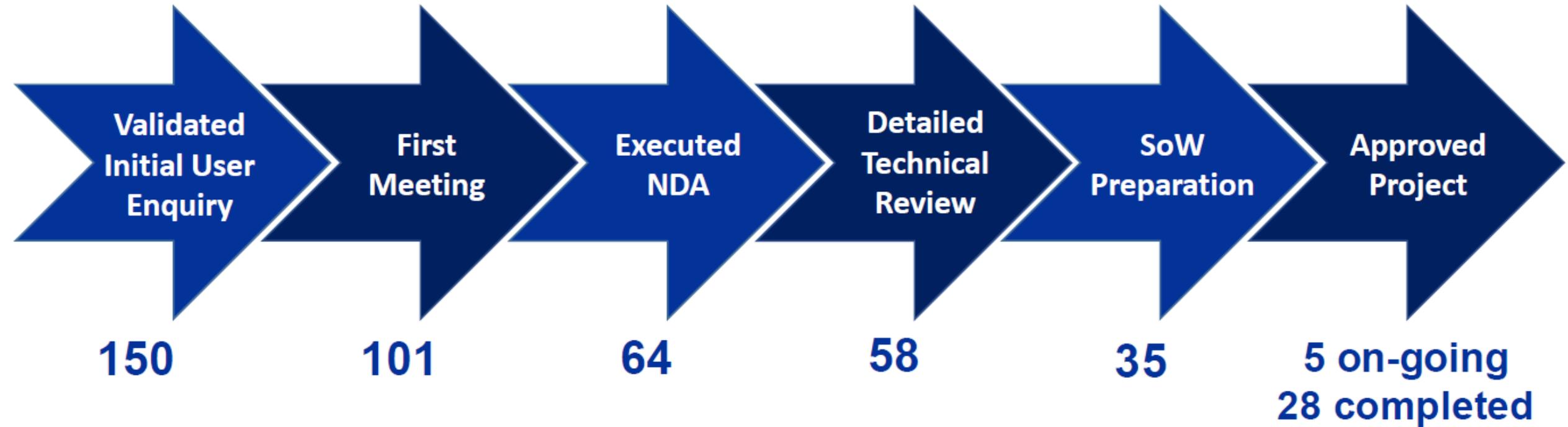
## With PHABULO $\mu$ S



Pilot lines have single access point



# Pilot line: positive experience



## New: PhotonHub Europe

- A new pan-European photonics digital innovation hub
- One-stop shop for Photonics
- A broad range of services and capabilities in particular “non-photonics” SMEs and mid-caps
- 53 partners among which are
  - CSEM
  - EPFL
  - Swissphotonics
  - Ligentec

Thank you for your attention!

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